

RESULTS OF THE EXCAVATION

Introduction

The entire site area was covered in a dense tangle of vines and trees prior to excavation (Figures 4 and 5). Although the majority of these were removed from the surface, the roots continued to present an obstacle throughout the investigations. Their removal was very time consuming and also made the interpretation of stratigraphy difficult. This was compounded by the fact that the site is located in a floodplain within 100 feet of the Black River, and many layers and lenses of flood-deposited soils were present.

The excavation focused on the core of the site area as defined by NCDOT archaeologists during the previous investigations (Gray 1994b). This area was estimated at 2,700 square feet and is located approximately 100 feet west of the Black River bounded by NC 411 on the south, a boat landing drive on the north, and an unpaved driveway on the west (Figure 6). The investigations resulted in the excavation of ten 10-x-10-foot test units, four 5-x-5-foot test units, and 17 features.

Two natural soil zones were apparent in the excavation of the ten 10-x-10-foot units. (Figure 7). These zones were generally consistent in all the units though the depths of the zones varied in some instances. The ground surface was a leafy humic layer that contained a great deal of modern garbage, mostly bottles and cans. This level of leafy humus was stripped and discarded. Beneath this was an organic, dark grayish brown (10YR4/2) sandy loam, designated Zone 1. This layer ranged from 0.2 to 0.6 feet thick and contained a moderate amount of modern glass, as well as forge debris (charcoal, ash, slag, and clinker) and metal associated with the blacksmith shop. There is no abrupt break between Zone 1 and Zone 2, but more of a mottled interface between them. It is at this interface that most of the features, excluding forge refuse dumps, were first noted. Zone 2 was mainly a dark yellowish brown medium (10YR4/4) sand, although it was mottled in some areas. Only the top portion of Zone 2 was removed. This portion of the zone contained only historic artifacts. Unit N10 E60 had a particularly shallow Zone 1 and was the easternmost unit excavated. In some areas it is possible to see very thin sand laminae due to flooding episodes.

The stratigraphy recorded in the western portion of the site, during the excavation of the four 5-x-5-foot units, differed from the stratigraphy recorded in the 10-x-10 foot units. The stratigraphy in the 5-x-5-foot units, with the exception of S30W3, generally showed evidence for four soil zones (Figure 8). It appears that there is a buried A horizon in the western portion of the study area. Zone 1 is the same dark grayish brown as the other units; however, Zone 2 is a brown (10YR5/3) sand. This is followed by the buried A horizon, Zone 3, a very dark grayish (10YR3/2) brown sand. Zone 4 is the same dark yellowish brown sand as the Zone 2 in the 10-x-10-foot units. The stratigraphy in S30W3

was similar to that in the eastern portion of the site, showing evidence for only two soil zones (Figure 9).

Artifacts were found in Zones 1, 2, and 3 of the 5-x-5-foot units and included historic ceramics, metal, brick, and glass. The artifact assemblage from these units consisted mainly of historic ceramics and contained no forge refuse.

Excavation of the Features

A total of 17 features was excavated during the data recovery of Site 31SP300*1* (Table 2). Nine of these were postholes, two were pit features, one was a possible wheel repair station, one was a brick fall associated with the forge, two were ash/charcoal refuse pits, and one represented the floor joists of the structure. The majority of the features were located in the eastern half of the site in the area of the 10-x-10-foot units (Figure 10). Features were generally defined at the interface between Zones 1 and 2 or at the top of Zone 2. Three spatial designations were determined for the grouping of features and determining their associations: features defined in the forge area, features defined in the structure area, and features defined outside of the structure area.

Table 2: Features Excavated at 31SP300*1*

Feature Number	Provenience	Description
1	S10 E30	oval pit
2	S10 E30	shallow posthole
3	S10 E30	shallow posthole
4	S10 E30	shallow posthole
5	S20 E40	rectangular post mold
6	S20 E40	crossbeams/possible wheel-working stand
7	S10 E30, S10 E40, S20 E30, S20 E40	floor joists of structure
8	S0 E30, S10 E30	brick fall/forge debris
9	S20 E40	posthole
10	S10 E30	pit feature
11	S0 E40, S10 E40	refuse pit
12	S10 E40	post mold/hole with post
13	S10 E30, S10 E40	shallow post
14	S30 E40	refuse pit
15	S30 E20	shallow post with mold
16	S45 W10	posthole/mold
17	S45 W32	posthole/mold

Features Defined in the Forge Area

Features defined within the forge area include a brick fall associated with the forge, five postholes, one post, and two pit features, one of which may represent the anvil stand. Descriptions of these features follow.

Brick Fall. Feature 8 was first identified at the interface between Zones 1 and 2 in Unit S10E30, which contained several features that appeared to constitute a forge area. This feature was also recognized at the Zone 1 and 2 interface in Unit S0E30 (Figure 11). Feature 8 was defined as a roughly circular, 6 foot in diameter, scatter of bricks within a clean, light yellowish brown (2.5Y6/3) sand matrix (Figure 12). The brick fall was on top of a refuse lens within Zone 1 that contained ash, charcoal, slag, clinker, and metal. This lens was present in most of the unit, and was also present in portions of units S0E30 and S10E40. The floor joists constitute the lens boundary to the south. The lens soil matrix was a very dark grayish brown sandy loam just like Zone 1, but was a slightly darker color due to its contents. The floor of the shop, designated Zone 2, was found directly below the lens. The remaining features were recognized at this level.

Feature 8, and the refuse lens beneath it, may represent the actual forge. Forges were made of durable materials, such as stone or brick, and were either mortared or dry-laid. The forge was generally waist-high, filled with rubble, and topped with firebrick or sand (Light 1984). Forges ranged in size from two feet square to three to five feet square. The scatter of bricks may represent the foundation for the forge. In addition, the layer of sand recognized within this feature may in fact represent the sand that would have been placed on the top of the forge foundation. The presence of ash, charcoal, slag, clinker, and metal also indicates that this feature may be the remnants of the forge.

Postholes. Features 2, 3, 4, and 13 were all shallow postholes found within the general forge area in Units S10E30 and S10E40 (Figures 13 and 14). All three postholes measured 0.2 to 0.3 feet deep. They contained metal fragments and charcoal. Feature 4 also contained window glass. They were all visible at the base of Zone 1 as very dark grayish brown (2.5Y3/1 for Feature 2, and 2.5Y3/2 for Features 3 and 4) stains. Feature 13 was a dark brown sand (7.5Y3/2). The fill was a medium sand.

These four postholes may represent support posts for a roof or other protective structure that would have covered the forge area. It appears that the forge was not contained within a formal walled structure, but there was more than likely some sort of roof covering the forge area.

Feature 12 was also a posthole located adjacent to a timber that extended out northwest from the floored area in Unit S10E40 (See Figure 14). The posthole contained a fill of very dark grayish brown (2.5Y3/2) sand mixed with yellowish brown (10YR5/4) sand. The only artifact was a nail recovered from the bottom of the feature. The posthole extended to a depth of 1.2 feet.

The excavation of this posthole revealed an actual post that was attached perpendicularly to the timber mentioned above (Figures 15 and 16). It appears that this beam, included in the Feature 7 designation, may not necessarily be a floor joist. It is situated at a 90-degree angle to the other floor joists and appears to be located outside the boundaries of the structure. Its exact function was not determined.

Pit features. Features 1 and 10 represent the only pit features excavated on the site and were defined in Unit S10E30 at the top of Zone 2 (See Figure 13). Feature 1 was a clearly defined oval stain (Zone 3) that was overlapped by another oval stain containing a square, black (2.5Y2.5/1) area (Zone 1) with a high charcoal content and some metal (Figures 17 and 18). The overlapping oval was separated by a relatively clean olive brown (2.5Y4/4) sand ring (Zone 2). Two shallow pockets (0.6 foot deep), which may represent postholes, were associated with the feature on either side intruding into Zone 1. Zone 3, a very dark grayish brown (2.5Y3/2) mottled sand, existed beneath Zones 1 and 2. Iron, glass, and slag were present in Zone 3. The feature measured three feet north-south by two feet east-west, excluding the possible posts. It was 0.9 foot deep, and was cut slightly by Feature 10 on its north edge. It is possible that this feature represents the location of the anvil. Generally, the anvil would be mounted on a tree stump in proximity to the forge. Rarely is the actual anvil represented archaeologically, but the remains of the stump or mount could be recognizable in the form of a pit feature if the stump is no longer present. Feature 1 resembles what could have been the mount for the anvil. In addition, a scattering of large quantities of metal artifacts was located in the area surrounding the pit feature (Figures 19 and 20).

Feature 10 was an odd-shaped, deep feature that consisted of a roughly rectangular pit with an oval attached at the west end (Figures 21 and 22). Excavation revealed that there was a deep post with parallel timber supports on either side located in the center of the rectangular portion of the feature (Figure 23). These timbers did not run the full length of the feature and contained nails that probably had connected them to the post. A portion of the post was still intact within a post mold that extended 0.4 foot below the rest of the feature. The top portion of the post mold did not contain intact brick, but was filled with brick fragments, ash, sand, and some wood and charcoal. The feature had a maximum depth of 2.4 feet.

The feature contained three distinct zones (Figure 24 and 25). Zone 1 was a layer of yellowish brown (10YR5/6) sand washed in on the top of the feature by flooding. This was evident from the swirled appearance of the sand. This zone slightly intruded into Feature 1. Zone 1 contained some iron, slag, and clinker. Zone 2 was representative of another flooding episode. It was a light olive brown (2.5Y5/4) sand layered with yellowish brown (10YR5/6) sand and olive brown (2.5Y4/4) sand, and was visible at the top of the feature on the western edge. Artifacts recovered from this zone included iron, slag, and clinker. Zone 3 represented cultural fill and contained quite a bit of iron, as well as some slag, clinker, glass, and brick. The fill was an olive brown (2.5Y4/4) sand mottled with dark olive brown (2.5Y3/3) sand. Zone 3 occurs at a higher elevation in the eastern half of the feature.

It is possible that this was part of the forge, although the post may have been either part of a crane or hoist device, or support for bellows. As the brick from Feature 8 was found directly above it, and the post mold contained brick, it is likely that it was part of the forge station.

Features Defined in the Structure Area

Features associated with the structure and apparent wood floor include the floor joists, a posthole, and an unidentified rectangular stain.

Floor joists. The floor joists were collectively referred to as Feature 7 (Figures 26 and 27). Joists were present in units S10E30, S10E40, S20E30, S20E40, and S30E40. It was apparent that repairs had been made to the joists through the years based on the presence of older cut nails in timbers beneath other timbers with wire nails. The base of the joists rested within Zone 2.

Possible Wheel Repair Station. Located in the center of the floored area, Feature 6 appeared at the base of Zone 1, Unit S20E40 (Figures 28 and 29). Zone 1 of this feature was comprised of a jumble of burnt and decayed wood, charcoal, and nails. Underlying this debris were two beams forming a cross. These beams, designated Zone 2 of the feature, were exposed at an elevation below the floor joists. These 2.5-foot-long beams had long, cut nails that protruded straight up from the center where they joined. This could have been the base for a wheel or barrel working stand, or an axle straightener.

Posthole. Feature 9 was a probable posthole associated with Feature 6 (See Figure 28). It was located at the end of one of the crossbeams and was very shallow, measuring only 0.15 foot deep. The fill, a very dark gray (7.5YR3/1) sand, contained nails.

Unidentified rectangular stain. Feature 5 was a shallow, 2-x-1.2-foot, rectangular stain located directly to the east of Feature 6 (See Figures 28 and 29). It measured only 0.28 foot in depth and was at a right angle to the floor joists. Fifty percent of the fill was composed of a reddish black (10R2.5/1) sandy loam, and 50 percent was rotted wood. In the south half of the feature, a possible post mold which was not apparent at the surface, contained gar fish scales. Iron, bone, shell, and glass were also present in the fill. This feature may represent a refuse pit or trash dump.

Features Defined Outside the Structure Area

Forge Refuse Pits. Two forge refuse pits, Features 11 and 14, were discovered along the outer wall of the defined structure. Feature 11 was located in units S10E40 and S0E40 (Figures 14 and 30). Only the south half, located in S10E40, was excavated. The amorphous feature measured approximately 6.3 feet east-west and 6.5 feet north-south (Figure 31). It was a low mound and was 0.6 foot thick at its thickest point. It was underlain by Zone 2 only along the east wall of the structure. The feature appeared to

contain two zones (Figure 32). Zone 1 consisted of approximately 20 percent dark yellowish brown (10YR3/4) sand, 50 percent charcoal, 20 percent slag/clinker, 5 percent brick, and 5 percent iron. Zone 2 was a very dark gray (2.5Y3/1) fine sandy loam mixed with light grayish brown (2.5Y6/2) sand and ash that contained less metal, slag, clinker, and brick than Zone 1. There was tree disturbance in the eastern portion of the feature. The western boundary of the feature was the eastern wall of the structure. The edge of the feature was abrupt, as it was located directly along the wall of the structure, indicating that this feature is indeed a refuse pit.

Feature 14 was located along the south wall of the structure. It was first identified as a charcoal stain surrounding tree roots quite near the surface in Unit S30E40 (Figures 33 and 34). Further excavation made it clear that most of the unit south of the floor joists was covered by this refuse dump. Thus, the boundaries of the feature were never fully delineated since units S30E30, S30E50, and S40E40 were not excavated. The southern portion of the feature was disturbed by fill associated with the building of the road. This was removed and discarded. The feature was still intact beneath the road disturbance. The feature contained three zones. Zone 1 was a charcoal-rich sand with slag, clinker, iron, and glass. Zone 2 was an olive brown (2.5Y4/3) sand that contained a large quantity of metal, as well as some glass, brick, and charcoal. These two zones were heavily intermingled in some areas. Zone 3 was identified as a light olive brown (2.5Y5/4) sand mottled with light yellowish brown (2.5Y6/4) sand that contained metal and prehistoric sherds. Several root stains were apparent near the base of Zone 3. Because of the great amounts of metal recovered from this feature, it is reasonable to assume that the feature may have been a scrap metal pile as well as a charcoal/ash/slag/clinker dump.

Postholes. Features 15, 16, and 17 are all posts not directly associated with the blacksmith-cooper shop. Feature 15 was present in S30E20 and was a very dark grayish brown (10YR2/3) sandy stain with some ash (Figure 35). It was first recognized at the base of Zone 1. It was very shallow (0.2 foot deep) and measured 1 x 1.1 feet. A possible post mold was seen in the profile. The feature was a square oriented southeast-northwest. The feature was bisected and the south half of the feature was removed. Metal and brick fragments were recovered.

Feature 16 was a posthole with the post still partially intact (Figure 36). It was discovered at the top of Zone 3 in Unit S45W10, one of the 5-x-5-foot units. The feature was bisected and the west half was removed. No artifacts were recovered from the dark grayish brown (10YR4/2) sand matrix. The posthole was 0.6 foot wide and 0.95 foot deep.

Feature 17 was also a post located in a 5-x-5-foot unit. It was found in Unit S45W32 and was first recognized as a square, grayish brown (10YR5/2) stain at the top of Zone 4 (Figure 37). Upon excavation, however, it appeared to be more round beneath the surface. The feature was bisected and the south half was removed. The sand matrix contained nails. The posthole was two feet deep and measured 0.8 x 0.6 feet on the surface. It was oriented northwest-southeast.

Areas of Metal Concentration. Two areas of metal concentration were also found near the structure. One was found within Zone 1 of Unit S10E20, and the other was present in units S0E30 and S0E40 (See Figure 10). Because these areas were difficult to define due to the large amount of root disturbance, they were not given feature numbers. However, the metal was bagged separately. The concentration in S0E30 was heavily disturbed by a tree in the northeast corner of the unit, but its outline can be seen in the north profiles of units S0E30 and S0E40. These areas were probably scrap piles.